

A NEW SPECIES OF *STENOTABANUS* (*BRACHYTABANUS*)
(DIPTERA: TABANIDAE) WITH A KEY TO THE
SPECIES OF THE SUBGENUS¹

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Abstract. — *Stenotabanus* (*Brachytabanus*) *sphaeriscapus* Wilkerson, new species, from Bolivia is described and figured. A key is provided for comparison to the other two species of the subgenus, *S. (B.) longipennis* Kröber and *S. (B.) platyfrons* Fairchild.

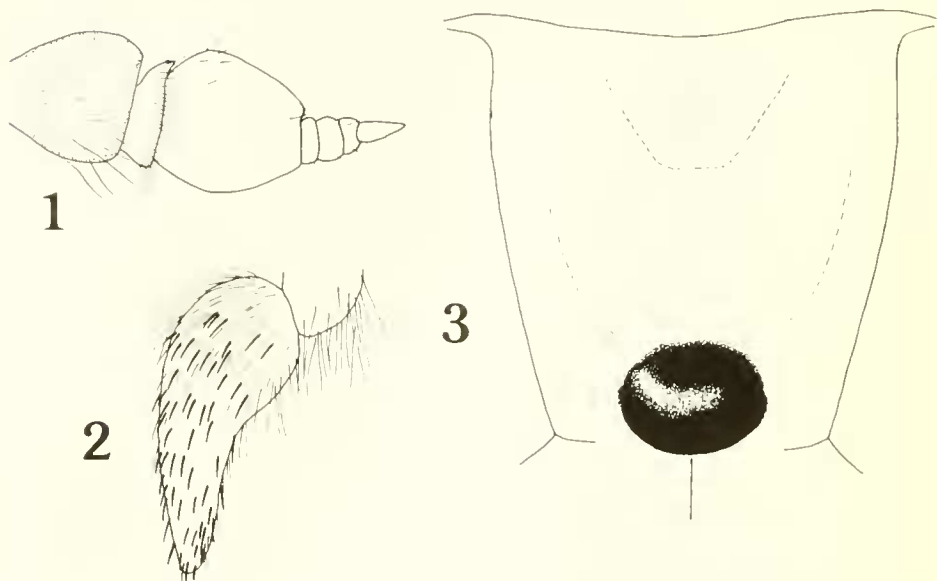
The subgenus *Brachytabanus* was proposed by Fairchild (1942) to accommodate *Stenotabanus longipennis* Kröber. Subsequently, 2 other species, *S. (B.) platyfrons* Fairchild and *S. (B.) sphaeriscapus* Wilkerson new species, have been discovered. *Brachytabanus* may be defined as follows: female eyes bare, green with 3 purple bands; frons very broad, frontal index less than 2.0; basal callus protuberant, wider than high, not touching sides of frons; a shiny spot at vertex but no vestiges of ocelli; anterior tentorial pits dark and shiny; antennal annuli quite short, often only 3 annuli in evidence; and wing with a short appendix on R_{4+5} or none.

The above differs somewhat from Fairchild's (1942) definition of the subgenus because of characters on the species described here. The most diagnostic characters are the broad frons, round or oval protuberant basal callus, bare tentorial pits and reduced antennal annuli. See Fairchild (1969) for a discussion of and a key to the genus *Stenotabanus* and its subgenera.

KEY TO FEMALE *STENOTABANUS* (*BRACHYTABANUS*)

1. Basal callus about $\frac{3}{4}$ or more of basal width of frons. Frons narrower, frontal index 1.7-1.9. Antennal flagellum relatively short, 0.4-0.6 as long as basal plate (Costa Rica, Panamá, Colombia, Venezuela) *longipennis*
- Basal callus about $\frac{1}{2}$ or less of basal width of frons. Frons broad, frontal index 1.5 or less. Antennal flagellum longer, about $\frac{3}{4}$ as long as basal plate 2
2. Antennal scape inflated, nearly spherical, shiny yellowish brown. Basal plate about as wide as long (Bolivia) *sphaeriscapus* n. sp.
- Antennal scape normal, not spherical, partially shiny yellowish brown. Basal plate distinctly longer than wide (1.3-1.4 times longer than wide) (N Argentina) *platyfrons*

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Figs. 1-3. Female, *Stenotabanus (Brachytabanus) sphaeriscapus*. 1, Antenna. 2, Palpus. 3, Frons.

***Stenotabanus (Brachytabanus) sphaeriscapus* Wilkerson NEW SPECIES**

Figs. 1-3

A small pale yellowish species with a very broad frons and protuberant black basal callus. Antennal scape shiny and spherical; basal plate and annuli short and compact; basal plate as long as wide. Abdomen above nearly black, with a broad middorsal pale stripe.

Female holotype. — Length: body 8.5 mm; wing 8 mm. Head structures in figures 1-3. Frontal index 1.5. Frons convergent below, width at vertex/width at base = 1.5. Frons pale yellow pollinose with sparse short black hairs and sparse yellow recumbent, scale-like hairs. Area near vertex slightly raised with a central shiny yellow patch. Remnants of ocelli not evident. Basal callus black, protuberant. Central area of frons slightly concave. Eye color and pattern not noted. Subcallus, gena and frontoclypeus pale yellow pollinose. Genal hairs and hairs of beard short and pale yellow except for a few black hairs on upper gena. Frontoclypeus sparsely short pale yellow haired. Anterior tentorial pits shiny black. Antennal scape nearly spherical, shiny yellowish brown, pedicel and flagellum pale yellow and pale yellow pollinose. Antennal hairs pale yellow. Palpus yellow, pale yellow and black haired as in Fig. 2. Proboscis pale yellowish brown, without shiny sclerotized areas; short, less than head height; labella relatively large, a little longer than palpal length.

Scutum and scutellum yellowish brown pollinose, pilosity a mixture of black hairs and yellow scale-like hairs. Scutum very faintly striped with a faint bluish cast anteriorly. Pleuron pale yellowish gray pollinose and sparsely pale yellow haired. Legs mostly yellowish brown and pale yellow haired. Foretibia darkened apically and mostly black haired. Mid- and hindtibiae with a few apical black hairs. Wing, including costal cell, glass-clear; venation normal, vein R_{4+5} (fork of 3rd vein) with a short appendix. Basicosta bare. Halter pale yellowish brown.

Abdomen above with a middorsal, nearly parallel sided pale yellowish brown and pale yellow haired stripe; on either side of this stripe, and about equal in width to it, are dark brown and black haired stripes; lateral areas and posterior borders of tergites 4–6 pale yellowish brown, and pale yellow haired. Abdomen ventrally pale yellow and pale yellow haired except for sternite 1 and anterior portion of 2 which have black integument showing through sparse pale yellow pollinosity.

Holotype.—♀, Bolivia, Cochabamba Dept., Villa Tunari, 240 m elev, 5-IX-1983, R. Wilkerson. To be deposited in the Florida State Collection of Arthropods (FSCA), Gainesville, Florida.

Discussion.—*Stenotabanus (B.) sphaeriscapus* n. sp. is quite similar to *S. (B.) platyfrons* but differs by having a shiny, nearly spherical antennal scape (thus the name), and by having a basal plate as wide as long (1.3 and 1.4 times longer than wide in *S. (B.) platyfrons*). In addition, the frons of *S. (B.) sphaeriscapus* is more convergent below (width at vertex/width at base 1.5 vs 1.3 and 1.2) than that of *platyfrons*, and the basal callus occupies a larger proportion of the basal width of the frons (0.50 vs 0.40 and 0.46). I believe the antennal characters are quite distinctive but the frontal characters may prove to be variable as more specimens become available.

Stenotabanus (Brachytabanus) longipennis Kröber

Stenotabanus longipennis Kröber 1929: 125, holotype, ♀, Vienna.

Stenotabanus (Brachytabanus) longipennis: Fairchild 1942: 300–301. Fairchild 1964: 175, ♂, Wilkerson 1979: 219–220.

Fairchild (1942) proposed the subgenus *Brachytabanus* for *S. longipennis* Kröber. I have seen Panamá material as follows: Panamá Prov, 1 ♂, Las Cumbres, 9-VI-1958 (G. B. Fairchild coll) (in coll G.B.F.); 1 ♀, Las Cumbres, 22-VI-1966 (G. B. Fairchild) (R.C.W.). Darién Prov, 1 ♀, Río Paya, 2-VI-1969 (G. B. Fairchild) (G.B.F.); 1 ♀, Río Imamado, Río Jaque, 17-IV-1947 (A. Wetmore) (G.B.F.); 1 ♀, Río Tacarcuna, 1900 ft (575 m), 9-VII-1963, compared with type of *S. longipennis* by G. B. Fairchild, Vienna, 1964, with good agreement (G. B. Fairchild) (G.B.F.). I also have before me the following specimens collected in Colombia by M. A. Tidwell (all in FSCA): 18 ♀, Antioquia Dept, Río Arquía, Pto Palacio, 9-IX-1977 (17) and 14-II-1978 (1) biting man; 1 ♀, Valle Dept, Bajo Calima, 6-II-1979. In addition there are records from the literature as follow: Fairchild (1942), 1 ♀, Venezuela, XI-1936; 14 ♀, Colombia, Muzo and Villavicencio; 1 ♀, Panamá, Gamboa, C.Z., 9-VII-1924; 2 ♀, Panamá, Utevey, near Pacora, 6-VIII-1941, on horse. Bequaert and Renjifo (1946), Colombia, Santander Dept, Bocas del Rosario, Río Magdalena; Colombia, "Upper Magdalena River." Lee et al. (1969), 1 ♀, Valle Dept, Río Raposo, 17-IX-1964. Hogue and Fairchild (1974), 1 ♂, Costa Rica, Puntarenas, Palmar.

See the key and discussion of *S. (B.) sphaeriscapus* for distinguishing characters. It is interesting to note that the presumed male of this species does not have shiny anterior tentorial pits but does have a pair of dark brown spots on the subcallus, these lacking in the female. Fairchild notes on 2 of the above female specimens that the eye pattern is glaucous green with 3 narrow reddish purple bands.

Stenotabanus (Brachytabanus) platyfrons Fairchild

Stenotabanus (Brachytabanus) platyfrons Fairchild 1964: 174, holotype, ♀, Argentina, Tucumán, CAS (examined); Coscarón 1975: 26–28, pl. 5, A–H.

In addition to the holotype I have before me a paratype from Argentina, Río Bermejo, XI-916. The holotype bears the date 16–19-I-1957. Another paratype is in the Museum of Comparative Zoology, from Argentina, Jujuy. Fairchild's (1964) figure proves to be of the paratype from Río Bermejo, not of the holotype. The basal callus of the holotype is without the upward extension shown in his figure. Coscarón (1975) redescribes this species and gives complete figures including female genitalia. Also, he saw 2 females from Argentina, Tucumán Prov, Río Viejo, 8-X-1943. *Stenotabanus platyfrons* has an eye pattern of 3 narrow dark lines on a light green background.

This species is quite close to *S. (B.) sphaeriscapus* n. sp. See the key and discussion section of *S. (B.) sphaeriscapus* for distinguishing features.

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